

In the claims:

The following listing of claims replaces all prior versions and listings of claims in the pending application:

1. (Currently amended) A network failover transition system ~~for a wide area fiber optic network having a plurality of ports communicating over a VLAN~~ comprising:

~~a dual overlay ring topology having a first loop along a first physical path and a second ring along a second physical path, wherein said second physical path is substantially distinct from said first physical path;~~

~~a first switch having adapted to transition between a master mode switch and a standby switch mode, said first switch running only a layer 2 protocol and configured to provide switching between said ports while in said master mode;~~

~~a second switch having adapted to transition between a master switch mode and a standby switch mode, said second switch running only a layer 2 protocol and configured to provide switching between said ports while in said master mode, wherein said second switch is in said standby modeswitch when said first switch is in said master switchmode, and said second switch is in said master switchmode when said first switch is in said standby switchmode;~~

~~a plurality of end devices comprising a forwarding database and adapted to communicate with the first switch and the second switch through a VLAN, and wherein,~~

~~said firstthe master switch is configured, upon a detection of a network failure, to, notify the plurality of end devices to,~~

~~flush the forwarding database, and restart auto-negotiation of said ports, and to transition to said standby mode; and wherein said second switch is configured, upon said detection of a network failure, to transition to said master mode; and wherein, upon said configuration of said second switch to transition to said master mode, at least one of said ports flushes a layer 2 forwarding database and rebroadcasts for a new path over the said wide-area fiber-optic network.~~

2. (Original) The network failover transition system of claim 1, wherein said VLAN is part of an Ethernet network.

3. (Currently amended) The network failover transition system of claim ~~1~~2, wherein said VLAN utilizes a router protocol adapted~~able to utilizing said first switch and said second switch, said router protocol further comprising a set of mechanisms to effectuate said transition~~ theof said first switch to the standby mode, switch from the master switch and the second switch to the master switch from the standby switch.

4. (Original) The network failover transition system of claim 3, wherein said first and second switches are Layer 2 switches.

5. (Currently amended) The network failover transition system of claim 4, wherein the plurality of end devices comprises~~said ports are~~ Layer 3 devices.

6. (Currently amended) The network failover transition system of claim 1, wherein at least one of ~~said ports~~the plurality of end devices utilizes Address Resolution Protocol.

7. (Currently amended) The network failover transition system of claim 1, wherein all of ~~said ports~~the plurality of end devices utilize Address Resolution Protocol.

8. (Original) The network failover transition system of claim 1, wherein said network failure is detected using ping track.

9. (Original) The network failover transition system of claim 1, wherein said network failure is detected using port track.

10. (Currently amended) A method of failover transitioning a ~~wide-area fiber-optic~~ VLAN having a dual overlay ring topology within a core, ~~said dual overlay ring having a first loop along a first physical path and a second ring along a second physical path, wherein said second physical path is substantially distinct from said first physical path, and~~ with a plurality of ~~ports~~end devices comprising:

establishing a first switch having a master mode and a standby mode as a master switch;
~~said first switch running only a layer 2 protocol;~~

configuring said master switch to provide switching ~~between said ports~~for the plurality of end devices;

establishing a second switch having a master mode and a standby mode as a standby switch;
~~said second switch running only a layer 2 protocol;~~

detecting a communication failure on said VLAN;

~~restarting auto-negotiation of said ports with said master switch;~~

~~flushing a layer 2 forwarding database from at least one of said ports and rebroadcasting for a new path over said wide-area fiber-optic network;~~

transitioning said first switch to standby mode, whereby said first switch becomes said standby switch; and

transitioning said second switch to master mode, whereby said second switch becomes said master switch;

sending a notification of the communication failure to at least one of the end devices;

flushing a forwarding database from at least one of the end devices; and

rebroadcasting for a new path over the VLAN from one of the end devices.

11. (Original) The method of failover transitioning a VLAN of claim 10, wherein said VLAN is part of an Ethernet Network.

12. (Currently amended) The method of failover transitioning a VLAN of claim ~~11~~10, wherein said VLAN utilizes a router protocol adapted~~able to utilizing said first switch and said second switch, said router protocol further comprising a set of mechanisms to effectuate said transition~~ the of said first switch to standby mode.

13. (Canceled)

14. (Currently amended) The method of failover transitioning a VLAN of claim ~~13~~12, wherein said ~~ports~~plurality of end devices are Layer 3 devices.

15. (Currently amended) The method of failover transitioning a VLAN of claim 10, wherein at least one of ~~said ports~~the plurality of end devices utilizes Address Resolution Protocol.

16. (Currently amended) The method of failover transitioning a VLAN of claim 10, wherein all of ~~said ports~~ the plurality of end devices utilize Address Resolution Protocol.

17. (Original) The method of failover transitioning a VLAN of claim 10, wherein said detecting step comprises using ping track.

18. (Original) The method of failover transitioning a VLAN of claim 10, wherein said detecting step comprises using port track.

19. (Previously presented) The network failover transition system of claim 1, further comprising a third switch having a master mode and a standby mode, said third switch configured to provide switching between a second set of ports while in said master mode, wherein said second switch is in said master mode when said third switch is in said standby mode, and said second switch is in said standby mode when said third switch is in said master mode.

20. (New) The network failover transition system of claim 1 wherein, the network failure comprises a network failure that does not directly impact the plurality of end devices.

21. (New) The network failover transition system of claim 1 wherein, the plurality of end devices comprise one of non-ESRP-aware devices and non-ExtremeWare manufactured devices.